WHAT IS CLAIMED IS:

1. A stand alone sensor module comprising:

a sensor;

a signal interface; and

a processor connected to the sensor and the signal interface, wherein the processor receives signals from the sensor and the signal interface, generates a vehicle status signal as a function of the signals received from the sensor and the signal interface and drives the vehicle status signal to the signal interface.

2. The sensor module according to claim 1, wherein the signal interface includes a vehicle condition input for receiving a signal representative of a vehicle condition.

3. The sensor module according to claim 2, wherein the signal interface includes an output that receives the vehicle status signal from the processor.

4. The sensor module according to claim 1, wherein the signal interface includes an output that receives the vehicle status signal from the processor.

5. The sensor module according to claim 1, wherein the signal interface includes a data bus for receiving a signal representative of a vehicle condition and for driving a signal representative of the vehicle status signal received from the processor.

6. The sensor module according to claim 1, wherein the signal interface includes a sensor input for receiving signals from a second sensor.

7. The sensor module of claim 1, wherein the sensor includes an ultrasonic sensor and a radar sensor.

8. The sensor module of claim 6, wherein the second sensor comprises a stand alone sensor module.

9. The sensor module of claim 6, wherein the second sensor comprises at least one slave sensor.

10. The sensor module of claim 6, wherein the second sensor comprises a stand alone sensor module and at least one slave sensor.

11. A stand alone sensor module comprising:

a sensor;

a signal interface; and

a processor connected to the sensor and the signal interface, wherein the processor receives signals from the sensor and the signal interface, generates a hazard status signal as a function of the signals received from the sensor and the signal interface and drives the hazard status signal to the signal interface.

12. The sensor module according to claim 11, wherein the signal interface includes a hazard condition input for receiving a signal representative of a hazard condition.

13. The sensor module according to claim 12, wherein the signal interface includes an output that receives the hazard status signal from the processor.

14. The sensor module according to claim 11, wherein the signal interface includes an output that receives the hazard status signal from the processor.

15. The sensor module according to claim 11, wherein the signal interface includes a data bus for receiving a signal representative of a hazard condition and for driving a signal representative of the hazard status signal received from the processor.

16. The sensor module according to claim 11, wherein the signal interface includes a sensor input for receiving signals from a second sensor.

17. The sensor module of claim 11, wherein the sensor includes an ultrasonic sensor and a radar sensor.

18. The sensor module of claim 16, wherein the second sensor comprises a stand alone sensor module.

19. The sensor module of claim 16, wherein the second sensor comprises at least one slave sensor.

20. The sensor module of claim 16, wherein the second sensor comprises a stand alone sensor module and at least one slave sensor.

21. A collision avoidance system, comprising:

a first stand alone sensor module comprising:

a first sensor;

a first signal interface;

a first processor connected to the first sensor and the first signal interface, wherein the first processor receives signals from the first sensor and the first signal interface and drives a first vehicle status signal to the first signal interface as a function of the signals received from the first sensor and the first signal interface;

a second stand alone sensor module connected to the first stand alone sensor comprising:

a second sensor;

a second signal interface;

a second processor connected to the second sensor and the second signal interface, wherein the second processor receives signals from the second sensor and the second signal interface and drives a second vehicle status signal to the second signal interface as a function of the signals received from the second sensor and the second signal interface; and

a display module connected to the first signal interface and the second signal interface that receives the first and second vehicle status signals and displays vehicle status information representative of the first and second vehicle status signals.

22. The collision avoidance system of claim 21, wherein the display module is wirelessly connected to the first signal interface and the second signal interface.

23. The collision avoidance system of claim 21, wherein the first sensor and the second sensor each comprise an ultrasonic sensor and a radar sensor.

24. The collision avoidance system of claim 23, wherein the processor includes a means for coupling to at least one stand alone sensor module and at least one slave sensor.

25. The collision avoidance system of claim 21, wherein the display module displays hazard information.

26. The collision avoidance system of claim 21, wherein the display module includes a visual and an audio display module.

27. The collision avoidance system of claim 21, wherein the first signal interface and the second signal interface each include a vehicle condition input for receiving a signal representative of a vehicle condition.

28. The collision avoidance system of claim 27, wherein the first signal interface includes an output that receives the first vehicle status signal from the first processor and the second signal interface includes an output that receives the second vehicle status signal from the second processor.

29. The collision avoidance system of claim 27, wherein the first signal interface includes an output that receives the first vehicle status signal from the first processor and the second signal interface includes an output that receives the second vehicle status signal from the second processor.

30. The collision avoidance system of claim 27, wherein the first signal interface includes a first data bus for receiving a first signal representative of a vehicle condition and for driving a signal representative of the first vehicle status signal received from the first processor.

31. The collision avoidance system of claim 27, wherein the second signal interface includes a second data bus for receiving a second signal representative of a vehicle condition and for driving a second signal representative of the second vehicle status signal received from the second processor.

32. The collision avoidance system of claim 27, wherein the first and second signal interfaces each include a sensor input for receiving signals from a third sensor.

33. The collision avoidance system of claim 27, wherein the first and second sensors each comprise an ultrasonic sensor and a radar sensor.

34. The collision avoidance system of claim 32, wherein the third sensor comprises a stand alone sensor module.

35. The collision avoidance system of claim 32 wherein the third sensor comprises a slave sensor.

36. A stand alone sensor system, comprising:

a sensor;

a signal interface;

a display unit; and

a processor connected to the sensor, the signal interface and the display unit, wherein the processor receives signals from the sensor and the signal interface, generates a vehicle status signal as a function of the signals received from the sensor and the signal interface and drives the vehicle status signal to the display unit.

37. The sensor system of claim 36, wherein the display unit includes a visual and an audio display, wherein the audio display is wirelessly coupled to the visual display unit.

38. The sensor system of claim 36, wherein the signal interface includes a data bus for receiving a signal representative of a vehicle condition and for driving a signal representative of the vehicle status signal received from the processor.

39. The sensor system of claim 36, wherein the signal interface includes an output that receives the vehicle status signal from the processor.

40. The sensor system of claim 38, wherein the signal interface includes an output that receives the vehicle status signal from the processor.

41. The sensor system of claim 36, wherein the display unit is wirelessly connected to the processor.

42. A stand alone sensor system, comprising:

a sensor;

a signal interface;

an information device; and

a processor connected to the sensor, the signal interface and the information device, wherein the processor receives signals from the sensor and the signal interface, generates a vehicle status signal as a function of the signals received from the sensor and the signal interface and drives the vehicle status signal to the information device.

43. The sensor system of claim 42, wherein the information device comprises a display unit and a data recorder.

44. The sensor system of claim 43, wherein the display unit includes a visual and an audio display, wherein the audio display is wirelessly coupled to the visual display unit.

45. The sensor system of claim 42, wherein the signal interface includes a data bus for receiving a signal representative of a vehicle condition and for driving a signal representative of the vehicle status signal received from the processor.

46. The sensor system of claim 42, wherein the signal interface includes an output that receives the vehicle status signal from the processor.

47. The sensor system of claim 45, wherein the signal interface includes an output that receives the vehicle status signal from the processor.

48. The sensor system of claim 42, wherein the display unit is wirelessly coupled to the display unit.

49. A collision avoidance system, comprising:

a first stand alone sensor module comprising:

a first sensor;

a first vehicle condition input;

a first signal interface;

a first processor connected to the first sensor, the first vehicle condition input and the first output, wherein the processor receives signals from the first sensor and the first vehicle condition input and drives a first vehicle status signal on the first output as a function of the signals received from the first sensor and the first vehicle condition input;

a second stand alone sensor module coupled to the first stand alone sensor module comprising:

a second sensor;

a second vehicle condition input;

a second signal interface;

a second processor connected to the second sensor, the second vehicle condition input and the second output, wherein the processor receives signals from the second sensor and the second vehicle condition input and drives a second vehicle status signal on the second output as a function of the signals received from the second sensor and the second vehicle condition input; and

a display module connected to the first output and the second output that receives the first and second vehicle status signals and displays vehicle status information representative of the first and second vehicle status signals;

a first slave sensor coupled to the first processor; and

a second slave sensor coupled to the second processor.

50. The collision avoidance system of claim 49, wherein the first slave sensor is wirelessly coupled to the first processor.

51. The collision avoidance system of claim 49, wherein the second slave sensor is wirelessly coupled to the second processor.

52. The collision avoidance system of claim 49, wherein the second stand alone sensor module is wirelessly coupled to the first stand alone sensor module.

53. The collision avoidance system of claim 49, wherein the first signal interface and the second signal interface each include a vehicle condition input for receiving a signal representative of a vehicle condition.

54. The collision avoidance system of claim 53, wherein the first signal interface includes an output that receives the first vehicle status signal from the first processor and the second signal interface includes an output that receives the second vehicle status signal from the second processor.

55. The collision avoidance system of claim 49, wherein the first signal interface includes an output that receives the first vehicle status signal from the first processor and the second signal interface includes an output that receives the second vehicle status signal from the second processor.

56. The collision avoidance system of claim 49, wherein the first signal interface includes a first data bus for receiving a first signal representative of a vehicle condition and for driving a signal representative of the first vehicle status signal received from the first processor.

57. The collision avoidance system of claim 56, wherein the second signal interface includes a second data bus for receiving a second signal representative of a vehicle condition and for driving a second signal representative of the second vehicle status signal received from the second processor.

58. The collision avoidance system of claim 56, wherein the first and second signal interfaces each include a sensor input for receiving signals from a slave sensor.

59. The collision avoidance system of claim 56, wherein the first and second sensors each comprise an ultrasonic sensor and a radar sensor.

60. A method of detecting an object with a stand alone sensor module, including:

receiving vehicle condition signals;

transmitting a detection signal;

receiving a return of the transmitted detection signal;

determining whether a hazard exists based on the return of the transmitted detection signal and the vehicle condition signals; and

transmitting a vehicle status signal to an information device.

61. The method of claim 60, wherein sending a first signal and sending a second signal to an information device comprises sending a first signal and a second signal to a display unit.

62. The method of claim 60, wherein sending a first signal and a second signal to an information device comprises sending a first signal and a second signal to a display unit and a data recorder.

63. The method of claim 60, wherein determining when a hazard exists includes detecting an object in a predetermined range.

64. The method of claim 63, wherein determining when a hazard exists includes determining the distance to the detected object and providing a third signal to the information device based on the distance to the object.

65. The method of claim 63, wherein determining when a hazard exists includes determining the time-to-impact the detected object and providing a third signal to the information device based on the distance and closing rate to the object.

66. The method of claim 60, wherein transmitting a vehicle status signal comprises wirelessly transmitting a vehicle status signal.

67. A method of detecting an object with a stand alone sensor module, including:

receiving vehicle condition signals;

performing a built-in-test;

sending a first signal to an information device, when a failure is detected in the built-in-test;

sending a second signal to the information device, when no failure is detected in the built-in-test;

transmitting a detection signal;

receiving a return of the transmitted detection signal;

determining whether a hazard exists based on the return of the transmitted detection signal and the vehicle condition signals; and

transmitting a vehicle status signal to the information device.

68. The method of claim 67, wherein performing a built-in-test includes determining whether sensors connected to stand alone sensor module are functioning.

69. A method of detecting and warning an approaching vehicle, comprising:

transmitting a detection signal;

receiving a return of the transmitted detection signal;

determining whether a hazard exists based on the return of the transmitted detection signal; and

transmitting a warning signal to the approaching vehicle.

70. The method of claim 69, wherein transmitting a warning signal to the approaching vehicle comprises transmitting a warning signal to the approaching vehicle, wherein the warning signal includes a high intensity flashing light.